

## COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., Chairman

JOHN W. PARSONS, ESQ., Executive Director

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. McCARTHY | JENNIFER F. SULLIVAN

## MEMORANDUM

TO: Lexington Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: November 9, 2020

This Commission is hereby furnishing you with approval of the revised funding schedule the Board recently adopted (copy enclosed). The schedule assumes payments are made quarterly and is effective in FY21 (since the amount under the prior schedule was maintained in FY21).

We note the Board maintained the 7.50% investment return assumption used in the 2016 and 2018 valuations. Although this assumption is acceptable, we believe it is at the high end of a reasonable range of investment return assumptions as of January 1, 2020. We note that we have generally recommended an assumption between 6.90% and 7.15% for our 2020 local system valuations. For comparison, there are 70 systems currently using an assumption of less than 7.50%.

The Board also updated the generational mortality assumption as part of this valuation.

Aside from the potential impact of plan provision or assumption changes, net losses with respect to any of these assumptions in the 2020 or future valuations would increase plan liabilities, extend the period until reaching full funding, and could require larger future appropriations than the amounts shown on the attached schedule. We note the appropriation levels increased and the amortization period extended four years from that of the prior schedule even though the system updated only the mortality assumption.

We are available to discuss these issues further. If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

JWP/jfb

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Enc.





https://shermanaclumry-my.sharepoint.com/personal/dam\_shermanaclumry\_com/Documents/Recovered Dats/Loxington/2020/[Lexington/20\_Val Prop Mortality.xlam]/Approp. Results

## Appropriation Forecast

Year     Employee     Normal Cost     Payments     Total Cost     Total Cost     Actuarial     Funded       Ending     Contribution     with Interest     with Interest     with Interest     % of Payroli     Liability     Ratio %       2021     \$3,941,231     \$1,572,302     \$5,183,235     \$6,755,537     15.4     \$44,614,237     79.9       2022     4,159,423     1,599,560     5,900,440     7,500,000     16.4     41,530,647     81.8       2023     4,389,271     1,626,088     6,623,912     8,250,000     17.2     38,739,933     83.5       2024     4,631,383     1,651,764     7,348,236     9,000,000     18.0     34,981,869     85.5       2025     4,886,396     1,676,458     8,073,542     9,750,000     18.6     30,183,874     87.9       2026     5,154,983     1,700,029     8,799,971     10,500,000     19.2     24,267,822     90.5       2027     5,437,847     1,722,327     9,527,673     11,250,000     19.7     17,149,620     93.5	
2021     \$3,941,231     \$1,572,302     \$5,183,235     \$6,755,537     15.4     \$44,614,237     79.9       2022     4,159,423     1,599,560     5,900,440     7,500,000     16.4     41,530,647     81.8       2023     4,389,271     1,626,088     6,623,912     8,250,000     17.2     38,739,933     83.5       2024     4,631,383     1,651,764     7,348,236     9,000,000     18.0     34,981,869     85.5       2025     4,886,396     1,676,458     8,073,542     9,750,000     18.6     30,183,874     87.9       2026     5,154,983     1,700,029     8,799,971     10,500,000     19.2     24,267,822     90.5       2027     5,437,847     1,722,327     9,527,673     11,250,000     19.7     17,149,620     93.5       2028     5,735,730     1,743,190     9,268,690     11,011,880     18.4     8,738,748     96.8	ļ
2022   4,159,423   1,599,560   5,900,440   7,500,000   16.4   41,530,647   81.8     2023   4,389,271   1,626,088   6,623,912   8,250,000   17.2   38,739,933   83.5     2024   4,631,383   1,651,764   7,348,236   9,000,000   18.0   34,981,869   85.5     2025   4,886,396   1,676,458   8,073,542   9,750,000   18.6   30,183,874   87.9     2026   5,154,983   1,700,029   8,799,971   10,500,000   19.2   24,267,822   90.5     2027   5,437,847   1,722,327   9,527,673   11,250,000   19.7   17,149,620   93.5     2028   5,735,730   1,743,190   9,268,690   11,011,880   18.4   8,738,748   96.8	**
2023   4,389,271   1,626,088   6,623,912   8,250,000   17.2   38,739,933   83.5     2024   4,631,383   1,651,764   7,348,236   9,000,000   18.0   34,981,869   85.5     2025   4,886,396   1,676,458   8,073,542   9,750,000   18.6   30,183,874   87.9     2026   5,154,983   1,700,029   8,799,971   10,500,000   19.2   24,267,822   90.5     2027   5,437,847   1,722,327   9,527,673   11,250,000   19.7   17,149,620   93.5     2028   5,735,730   1,743,190   9,268,690   11,011,880   18.4   8,738,748   96.8	
2024   4,631,383   1,651,764   7,348,236   9,000,000   18.0   34,981,869   85.5     2025   4,886,396   1,676,458   8,073,542   9,750,000   18.6   30,183,874   87.9     2026   5,154,983   1,700,029   8,799,971   10,500,000   19.2   24,267,822   90.5     2027   5,437,847   1,722,327   9,527,673   11,250,000   19.7   17,149,620   93.5     2028   5,735,730   1,743,190   9,268,690   11,011,880   18.4   8,738,748   96.8	
2025   4,886,396   1,676,458   8,073,542   9,750,000   18.6   30,183,874   87.9     2026   5,154,983   1,700,029   8,799,971   10,500,000   19.2   24,267,822   90.5     2027   5,437,847   1,722,327   9,527,673   11,250,000   19.7   17,149,620   93.5     2028   5,735,730   1,743,190   9,268,690   11,011,880   18.4   8,738,748   96.8	
2026 5,154,983 1,700,029 8,799,971 10,500,000 19.2 24,267,822 90.5   2027 5,437,847 1,722,327 9,527,673 11,250,000 19.7 17,149,620 93.5   2028 5,735,730 1,743,190 9,268,690 11,011,880 18.4 8,738,748 96.8	
2027 5,437,847 1,722,327 9,527,673 11,250,000 19.7 17,149,620 93.5   2028 5,735,730 1,743,190 9,268,690 11,011,880 18.4 8,738,748 96.8	
2028 5,735,730 1,743,190 9,268,690 11,011,880 18.4 8,738,748 96.8	
2029 6,049,410 1,762,442 0 1,762,442 2.8 0 100.0	
2030 6,379,707 1,779,897 0 1,779,897 2.7 0 100.0	
2031 6,727,481 1,795,355 0 1,795,355 2.6 0 100.0	
2032 7,093,636 1,808,599 0 1,808,599 2.5 0 100,0	
2033 7,479,121 1,819,399 0 1,819,399 2.4 0 100.0	
2034 7,884,936 1,827,509 0 1,827,509 2.4 0 100.0	
2035 8,312,128 1,832,665 0 1,832,665 2.3 0 100.0	
2036 8,761,801 1,834,583 0 1,834,583 2.2 0 100.0	
2037 9,235,112 1,832,964 0 1,832,964 2.1 0 100.0	
2038 9,733,279 1,827,484 0 1,827,484 2.0 0 100.0	
2039 10,171,277 1,909,720 0 1,909,720 2.0 0 100.0	
2040 10,628,984 1,995,658 0 1,995,658 2.0 0 100.0	
2041 11,107,288 2,085,462 0 2,085,462 2.0 0 100.0	
2042 11,607,116 2,179,308 0 2,179,308 2.0 0 100.0	
2043 12,129,436 2,277,377 0 2,277,377 2.0 0 100.0	
2044 12,675,261 2,379,859 0 2,379,859 2.0 0 100.0	
2045 13,245,648 2,486,953 0 2,486,953 2.0 0 100.0	
2046 13,841,702 2,598,866 0 2,598,866 2,0 0 100,0	
2047 14,464,579 2,715,814 0 2,715,814 2.0 0 100.0	
2048 15,115,485 2,838,026 0 2,838,026 2.0 0 100.0	
2049 15,795,681 2,965,737 0 2,965,737 2.0 0 100.0	
2050 16,506,487 3,099,196 0 3,099,196 2.0 0 100.0	
2051 17,249,279 3,238,659 0 3,238,659 2.0 0 100.0	
2052 18,025,497 3,384,399 0 3,384,399 2,0 0 100.0	

<sup>\*\*</sup> As of 1/1 prior to beginning of fiscal year